## **Galveston Bay Consumption Advisories**

Summary of Advisory Actions in Galveston Bay

- 1990 **ADV-3** issued suggesting limitations on consumption of <u>CATFISH</u> and <u>BLUE CRAB</u> after study found dioxin contamination. The original area of concern included the Houston Ship Channel and all contiguous waters north of a line drawn from Red Bluff Point to Five Mile Cut Marker to Houston Point. This original advisory grew out of the 1986 National Dioxin Study by the EPA, which led to the National Study for Chemical Residues in Fish (NSCRF) Study.
- 1994 Small study (5 samples) performed showing slightly lower levels of Dioxin, but inconclusive to change advisory, **ADV-3** continued unchanged.
- 1996 Study performed (24 samples). Results reaffirmed continuance of **ADV-3**.
- 1997-2000 Comprehensive Study of Galveston Bay showed high pesticide and PCB concentrations in fish in Upper Galveston Bay, Houston Ship Channel, and lower San Jacinto River.
- 2001 Dept of Health augments ADV-3 with ADV-20 which recommends that consumption of ALL FISH be limited to one eight-ounce portion per month or less due to high pesticide and PCB concentrations. This limitation on All Fish was for the waters upstream of the Lynchburg Ferry crossing, a much smaller area than the area encompassed by ADV-3 which still existed for catfish and blue crab. This modification was based on the comprehensive study performed from 1997 to 2000.
- 2004 DSHS and TCEQ sampled fish and crabs for metals, pesticides, VOCs, SVOCs, PCBs, and Dioxin. Results demonstrated that ADV-3 modified by ADV-20 should continue, and also that <u>SPOTTED SEATROUT</u> exhibited high PCB content. As a result ADV-28 was issued advising that consumption of <u>SPOTTED SEATROUT</u> should be limited from areas north of a line drawn from Red Bluff Point to Five Mile Cut Marker to Houston Point.
- 2008 ADV-35 was issued for the entire Galveston Bay system which recommends limiting consumption of <u>CATFISH</u> and <u>SPOTTED SEATROUT</u> due to high PCB and Dioxin concentrations.

## **Major Studies**

The issuance of advisories has been primarily influenced by significant large scale studies. While smaller studies reaffirmed the existing advisories, the major studies listed below led to the actual issuance and modification of each consumption advisory

In 1986 a nationwide study for the presence of Dioxin in different media (The National Dioxin Study) was performed by the EPA. It led to study for contaminants in fish residue (NSCRF – National Study for Chemical Residues in Fish) which found 11 sites in Region 6 to exhibit significant dioxin contamination. Almost all of these sites were downstream of "bleachkraft" pulp and paper mill discharges. This study led to the first issuance of an advisory, ADV-3, on Galveston Bay.

From 1997 to 2000 three EPA grants provided for a comprehensive study of all parts of Galveston Bay and surrounding waterbodies. This study showed that many areas, including Clear Creek and the majority of Galveston Bay, did not exceed DSHS Health-based Assessment Comparison Values (HAC Values) for many constituents. However, The Houston Ship Channel and Upper Galveston Bay, including the lower San Jacinto River, did still exhibit contamination. This study led to the issuance of ADV-21 which rescinded the standing advisory against fish consumption from Clear Creek, ADV-7. The study also

initiated the modification of ADV-3 for Upper Galveston Bay including the Houston Ship Channel with ADV-20 which extended the consumption advisory to all fish species.

In 2003-2004 the Galveston Bay Estuary Program received a grant from USEPA under the Clean Water Act §104(b)(3). The grant initiated the creation of the Seafood Consumption Safety Program for *The Galveston Bay Plan*. The program included a health characterization for the consumption of various fish. This characterization affirmed the continuance of ADV-3 as modified by ADV-20, but also noted high levels of PCBs in Spotted Seatrout. As a result ADV-28 was issued specifically advising limited consumption of Spotted Seatrout due to PCB contamination.

## **Sources:**

- 1) Texas Department of State Health Services (<a href="http://www.dshs.state.tx.us/seafood/survey.shtm">http://www.dshs.state.tx.us/seafood/survey.shtm</a>)
- 2) Texas Parks and Wildlife Deptartment (<a href="http://www.tpwd.state.tx.us/publications/annual/fish/consumption\_bans/">http://www.tpwd.state.tx.us/publications/annual/fish/consumption\_bans/</a>)